

DISCREPANT SELF-REPORTING IN MEN AND WOMEN'S ACCOUNTS OF SEXUAL
ASSAULT: AN ANALYSIS OF SURVEY ITEM WORDING

A Thesis
presented in partial fulfillment of requirements
for the degree of Master of Arts
in the department of Psychology
The University of Mississippi

by

WALTER THOMAS RUEFF JR.

December 2013

Copyright Walter Thomas Rueff Jr. 2013
ALL RIGHTS RESERVED

ABSTRACT

Researchers over the past several decades, both governmental and academic, have investigated sexual violence and determined that unwanted sexual contact is a serious epidemic in the United States. With the development and introduction of anonymous self-report surveys, such as the Sexual Experiences Survey (SES; Koss, Gidycz, & Wisniewski, 1987) researchers have seen increased disclosure rates of rape and other forms of sexual victimization amongst females. Efforts have also been made to describe male perpetration of sexual acts using a parallel version of the SES; however, persistent discrepancies between male-reported rates of perpetration and female-reported rates of victimization have raised questions about the applicability of the SES for male respondents. This thesis investigates the claim that suppressed male-reported rates are partly an artifact of survey item wording. Specifically, females are asked to report on the objective and subjective details of their own experiences (their own actions and desires), while men are additionally tasked with interpreting the female/victim's level of desire for the encounter. It was hypothesized that removing want-based language would increase male response rates for sexual contact and intercourse. Results are consistent with this hypothesis, with male responses significantly higher for contact and intercourse on the modified version. These results suggest further research is needed regarding the wording of sexual experience questionnaires, and the complexities of sexual consent.

DEDICATION

This thesis is dedicated to my mother and father, to my brother, and especially to my wife, Frannie. I would also like to thank my professors and peers who have helped guide my graduate career. In particular, I would like to thank Dr. Alan Gross, my advisor, and Elizabeth Kolivas, who provided the initial investigation and data for this thesis.

TABLE OF CONTENTS

ABSTRACT.....	ii
DEDICATION.....	iii
LIST OF FIGURES	v
I. INTRODUCTION	1
Prevalence and Incidence of Sexual Violence	4
The Sexual Experiences Survey (SES)	8
The Victimization-Perpetration Discrepancy	10
Survey Item Wording.....	12
II. METHODS.....	17
Participants.....	17
Measures	18
Sexual Experiences Survey (Koss et al., 1987)	18
Modified SES Items Devoid of “Want”	19
Procedure	20
III. RESULTS	22
Paired-Sample <i>t</i> -tests	22
McNemar’s Test.....	24
IV. DISCUSSION.....	29
Limitations and Suggestions for Future Research	33
LIST OF REFERENCES.....	34
LIST OF APPENDICES.....	39
APPENDIX A.....	40
APPENDIX B	42
VITA	47

LIST OF FIGURES

1. Female-Version Original SES Items for Coerced Contact and Coerced Intercourse	43
2. Female-Version Modified SES Items for Coerced Contact and Coerced Intercourse.....	43
3. Male-Version Original SES Items for Coerced Contact and Coerced Intercourse.....	44
4. Male-Version Modified SES Items for Coerced Contact and Coerced Intercourse	44
5. Male Responses to Contact Items Across Survey Versions	45
6. Male Responses to Intercourse Items Across Survey Versions.....	45
7. Female Responses to Contact Items Across Survey Versions.....	46
8. Female Responses to Intercourse Items Across Survey Versions	46

CHAPTER I

INTRODUCTION

Sexual violence represents a prominent public health and safety concern. Surviving acts of sexual violence has been linked to various sequelae of negative physiological, psychological, social, and economic outcomes, which may manifest acutely or chronically (Basile & Smith, 2011). For example, completed rape has been associated with genital injury in as many as 90% of victims (Sommers, 2007), as well as up to 30% increased risk of contracting sexually transmitted diseases (Koss & Heslet, 1992). Additional studies have indicated that rape may result in pregnancy in anywhere from 5% (Holmes, Resnick, Kilpatrick, & Best, 1996) to 26% (McFarlane et al., 2005) of female victims, depending on contextual factors. Survivors of sexual assault also appear to have an increased propensity for developing psychological problems such as Post-Traumatic Stress Disorder and depression (Sarkar & Sarkar, 2005), Generalized Anxiety Disorder, eating disorders, and sleep disorders (Burnam et al., 1988; Chen et al., 2010; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992; Sorenson & Golding, 1990). Sexual victimization can have social effects as well, disrupting relationships with intimate partners, as well as friends and family (Mackey et al., 1992; Crowell & Burgess, 1996), and has even been suggested to affect job performance for as long as 8 months after the incident (Resnick, Calhoun, Atkeson, & Ellis, 1981). Regarding economic effects, studies have demonstrated that sexually victimized women seek out medical services more frequently, and spend more money on medical

related costs than women who have not experienced sexual violence (Golding, 1999; Jacques-Tiura, Tkatch, Abbey, & Wegner, 2010).

Obtaining accurate and consistent estimates for women's experiences of sexual victimization and men's perpetrations of sexual aggression has been challenging. Researchers over the past four decades have criticized governmental definitions of rape and sexual assault for being too narrowly circumscribed, and producing restricted prevalence estimates (Abbey, Parkhill, & Koss, 2005). Additional limitations in survey methodology, related to survey-item wording and data collection procedures, have similarly led to depressed and variable rates throughout the literature (Koss, 1993; Fisher, Cullen, & Turner, 2000; Kolivas & Gross, 2007; Fisher, 2009). Advances in survey development, such as increased specificity for screening items (Lynch, 1996), a greater emphasis on anonymity (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006), and the implementation of behaviorally-specific survey items (Koss, Gidycz, & Wisniewski, 1987) has led to increases in prevalence and incidence rates of sexual violence.

The Sexual Experiences Survey (SES; Koss & Oros, 1982; Koss, Gidycz, & Wisniewski, 1987) has come to be considered the preeminent assessment tool for rape and sexual assault prevalence estimates (Kolivas, 2009). Previous research has demonstrated the importance of survey wording specificity for the purpose of accurate disclosure (Fowler, 1992; Schaeffer & Presser, 2003). Subjects tend to omit responses (even to pertinent questions) if there is incongruity between the wording of a question and how they label their own experiences; this should be a particular concern of sexual assault researchers, since many victims and perpetrators do not label their experiences as "rape" or "sexual assault," even in instances which meet the technical definition (Koss, 1993; Fricker, Smith, Davis, & Hanson, 2003).

In response to this potential problem, Koss and colleagues opt not to include terms or labels such as “rape” or “sexual assault,” which may potentially be misinterpreted or stigmatizing. Rather, items of the SES are meant to be behaviorally-specific descriptors of an event’s occurrences. For example, instead of asking “Have you ever been raped?” the SES has questions such as “Have you had sexual intercourse when you didn’t want to because you were overwhelmed by a man’s continual arguments and pressure” (Koss et al., 1987)? The item wording of the SES is meant to decrease ambiguity as well as to foster uninhibited disclosure – by allowing a more objective reporting of events without the need for stigma-laden identifiers (Abbey et al, 2006). Widespread usage of the SES has helped to establish rape and other forms of sexual violence as more pervasive problems than estimates from previous surveys would have suggested.

In addition to detecting female victimization rates, the SES also assesses perpetrations of sexual violence via a parallel version for male respondents. Current literature regarding the utility, reliability, and validity of assessment techniques for male self-reported perpetrations is less well developed than assessment of females’ victimization (Cook, 2002; Abbey et al., 2006; Kolivas, 2009). However, available studies show discrepant rates of female victimization and male perpetration (with perpetration rate typically lower) with some consistency (Koss et al., 1987; Kolivas& Gross, 2007). This victimization-perpetration discrepancy (VPD) has led some researchers to question the validity of perpetration estimates rendered by the SES male version (Kolivas& Gross, 2007; Kolivas, 2009).

The following review takes into consideration various techniques used by sexual violence researchers – with a particular emphasis on the SES. The purpose of this review is to examine ways in which methodological factors, such as survey item wording, can influence subsequent

rate estimates of sexual violence. In particular, seeking out potential explanations for the previously observed discrepancies between female self-reported victimization rates and male self-reported perpetration rates is a primary goal.

The following review takes into consideration various techniques used by sexual violence researchers – with a particular emphasis on the SES. The purpose of this review is to examine the ways in which methodological factors, such as survey item wording, can influence subsequent rate estimates of sexual violence. In particular, seeking out potential explanations for the previously observed discrepancies between female self-reported victimization rates and male self-reported perpetration rates is a primary goal.

Prevalence and Incidence of Sexual Violence

In the United States, estimated incidence rates of criminal activity (including sexual violence) are reported annually by various governmental agencies. The Federal Bureau of Investigation's (FBI) Uniform Crime Reports (UCR) and the Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS) are considered to be two of the most important contemporary sources of estimated incidences of sexual violence (Kolivas, 2009). However, these reports have some limitations.

As its title suggests, the UCR is a report of compiled crime statistics from the preceding year. This means that data published by the UCR are limited to only include crimes which have been reported to law enforcement entities. According to the UCR, approximately 84,767 incidences of rape were reported to law enforcement in 2010 (FBI, 2011). This translates to a rate of approximately 54.2 incidences of rape for every 100,000 women in the U.S., with an average of about 1 rape occurring every 6.2 minutes (FBI, 2011). To compile these figures, the

UCR defines rape as forcible completed rape or forcible attempts to commit rape; instances of statutory rape (without force) as well as other sexual offences are not included in these figures. By focusing solely on forcible tactics, and only instances which were reported to police, it seems likely that the UCR's figures are quite limited in scope, and underestimate the true nature and prevalence of sexual victimization. Indeed, accuracy of UCR rape estimates have been challenged by research demonstrating that victims of rape and attempted rape frequently do not report the crimes to police (BJS, 2011; Clay-Warner & Burt, 2005; Fisher et al., 2000; Koss et al., 1987).

The NCVS takes a different approach to collecting crime statistics than the UCR. Rather than relying solely on reported crimes, the NCVS obtains data on unreported crimes as well as by conducting interviews with a nationally representative sample of individuals above the age of twelve years old. Their methodology does not rely on statistics of reported criminal acts. Information obtained through this sample (n = 73,283 individuals in 2010) is extrapolated to compose national estimates. The NCVS reports that approximately 188,380 instances of rape/sexual assault occurred during the year of 2010, translating to about 13 out of every 10,000 women (BJS, 2011). Compared to the UCR, higher incidence rates reported in the NCVS seem commensurate with the assumption that victims of sexual violence often do not report to law enforcement authorities; according to the NCVS, incidents of rape/sexual assault are reported to the police only 50% of the time.

Although the NCVS demonstrates higher sensitivity than the UCR, researchers have criticized its methodological prowess. The BJS acknowledges the potential for inaccuracies in their data, and indeed the difficulty faced by all sexual violence researchers, when they state:

The measurement of rape or sexual assault represents one of the most serious challenges in the field of victimization research. Rape and sexual assault remain sensitive subjects

that are difficult to ask about in the survey context. As part of the ongoing redesign of the NCVS, BJS is exploring methods for improving the reporting of these crimes (BJS, 2011, p. 14)

This admonition, though perhaps a bit understated, is worthy of note because it points out how victims may be reluctant to report “sensitive” information, and that contextual factors (such as survey item wording) can affect the accuracy of self-report data from victims. Further, it raises the question of perpetrator self-report accuracy. If victims of sexual assault are reluctant to disclose sensitive information, it seems likely that perpetrators of such assaults would be at least equally hesitant. For individuals to accurately and voluntarily self-report instances in which they have perpetrated some act of sexual violence seems increasingly unlikely considering that doing so is self-incriminating, or, at least, socially undesirable.

Definitions of sexual violence have seen various iterations through the decades of governmental and academic inquiries. Operationalizing definitions which are sufficiently specific and germane to the contemporary context in which they are to be examined is of primary importance. Though once commonly conceived of as forced rape, researchers and law makers have helped to further expand and refine current definitions and categorizations of sexual violence. Large national studies over the past two and a half decades have progressively come to use greater breadth and specificity in how they conceptualize sexual violence (see National Sexual Violence Research Center [NSVRC], 2011). In the most contemporaneous iteration of large national studies, Black et al. (2011) adopt four distinct categories of sexual violence which guided development of the Centers for Disease Control and Prevention’s (CDC) National Intimate Partner and Sexual Violence Survey (NISVS). Firstly, rape represents completed, or attempted, unwanted penetration of any orifice by the use or threat of physical force, and includes instances in which a victim is unable to give consent (for example, due to being drunk

or drugged). Black et al., further specify three categories of rape: completed forced penetration, attempted forced penetration, and completed alcohol or drug facilitated penetration (p. 17).

Secondly, sexual coercion is any unwanted orifice penetration which occurs as a result of the victim being pressured into the act in a manner which is nonphysical. Catalysts for sexual coercion might include being persistently begged or nagged for sex, threats of relational or social consequences for not providing sex (e.g. ending the relationship, or spreading rumors), or use of authority to pressure a victim. The third category, unwanted sexual contact, consists of any unwanted sexual experience which falls short of penetration (for example, fondling or kissing). Lastly, non-contact unwanted sexual experiences include unwanted experiences of a sexual nature which do not involve physical contact (for example, verbal harassment or exposing ones genitals to a victim).

The NISVS is a nationally representative survey of adults in the United States. It measures rates of sexual violence, in addition to intimate partner violence and stalking, across an individual's lifetime, as well as within the prior 12 months. The survey was conducted via telephone random digit dial. It included individuals from each of the 50 states, with a total usable sample size of 16,507 completed surveys (7,421 men and 9,086 women). Results from the NISVS indicate that 12.3% of women have experienced a completed, forced rape in their lifetime. Further, 5.2% have experienced an attempted forced rape, and 8.0% have experienced a completed forced rape which was facilitated by alcohol or drugs (Black et al., 2011, p. 18). Of the women who have been raped, more than half (51.1%) report that the perpetrators were intimate partners (either current or former). Approximately 40.8% of victims were raped by an acquaintance, someone they knew who was not a current or former intimate partner. The NISVS also assesses perpetrator traits, though it does so indirectly via victim report.

A trained contingent of all female interviewers administered the survey over the telephone to each consenting participant. Black et al. determined that female interviewers would be more likely to have participants feel comfortable enough to disclose experiences with sexual violence than would male interviewers (p. 11). Regardless of interviewer gender, research suggests that methodologies which lack a level of anonymity produce depressed estimates of sexual violence, for victimization as well as perpetration (Kolivas, 2009).

The Sexual Experiences Survey (SES). The SES (Koss & Oros, 1982; Koss et al., 1987) is an anonymous, self-report survey which uses behaviorally-specific items. Anonymous self-report surveys using behaviorally specific questions have become the standard for research regarding the prevalence of sexual behavior (Kolivas, 2009), and have yielded significantly increased rate estimates compared to standard governmental surveys (Fisher et al., 2000). For example, Fisher's (2009) comparison of behaviorally specific questions to standard NCVS questions (which tend to be broad and vaguely worded) resulted in a nearly 11-fold increase in rape disclosure. As mentioned earlier, behaviorally specific questions are advantageous because they do not require respondents to label their experiences in a manner consistent with the question (e.g. "rape"), or be familiar with technical or legal definitions of terms (such as rape), and, as an objective recounting of experience, they do not carry the stigma associated with labels such as "rape" or "sexual assault."

Currently, the most widely used version of the SES (Koss et al., 1987) consists of 10 yes-or-no questions which ask about various tactics and sexual experiences. This version was revised by Koss and colleagues from the original SES which was developed five years earlier (Koss & Oros, 1982). The ten, yes-or-no questions of the SES assess four degrees of

increasingly severe aggressive or coercive sexual experiences: unwanted sexual contact (e.g. fondling, touching, and kissing); coerced vaginal intercourse (e.g. due to continued arguments, pressure, or threats); attempted rape, and completed rape.

Koss and colleagues (1987) used the SES to conduct the first investigation of incidence and prevalence of female sexual victimization in a nationally representative sample of college women ($n = 3,187$). The results of this study indicate that approximately 15% of women have been forcibly raped, noting that a further 12% have experienced attempted forcible rape during their lives. These numbers have been corroborated by numerous studies finding similar prevalence rates (see Kolivas, 2009; Gross, Winslett, Roberts, & Gohm, 2006; Koss & Oros, 1982; Winslett & Gross, 2008). The SES has been widely used and is generally considered to be the best available tool for measuring sexual victimization experienced by women (Gyls & McNamara, 1996; Porter & Critelli, 1992; Kolivas, 2009).

Unlike other surveys, the SES is also used to assess male perpetration of sexual violence through a parallel version of behaviorally specific questions. The male version of the SES (Koss et al., 1987) assesses perpetration of sexually aggressive and/or coercive behaviors towards women, as well as other contributory factors and characteristics. It has also been regarded as the best available self-report measure for perpetrations of sexual violence by men (Kolivas, 2009; Cook, 2002; Testa, 2002). As mentioned earlier, however, men's self-reported rates of perpetration differ substantially from women's self-reported rates of victimization.

Male perpetration rates of sexual violence are typically 66% to 75% less than victimization rates reported by females (Kolivas, 2009). For example, Koss and colleagues' (1987) national study found only 4% of men reported perpetrating acts of rape, as opposed to 15% of women whom reported being victimized. Concordantly, rates for attempted rape were

3% perpetration, and 12% victimization. Additional studies demonstrate similar rape perpetration rates (5.4%, Abbey, Wegner, Pierce, & Jacques-Tiura, 2012; 2.8%, Martin, 2010; 2.5%, Winslett & Gross, 2008; 4%, Senn, Desmarais, Verberg, & Wood, 2000; 5%, Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001). Although several consistent trends in prevalence rates for victimization and perpetration are apparent, other researchers have noted discrepancies within the SES literature which warrant further investigation.

With regard to general sexual assault, as opposed to rape, Abbey et al. (2005) cite prevalence rates which range from 51% to 70% for female victims, and from 25% to 61% for male perpetrators. These rates illustrate the argument made by some critics who contend that such elevated rates, and variability across studies, call into question the construct validity of the SES (Estrich, 1987; Gilbert, 1991). Others have taken issue with the apparent truth-through-consensus approach to establishing the SES's methodology, stating: "Popular use of the behaviorally specific approach is not sufficient to advance it as a standard. Establishing the validity of any approach is imperative, and the task is neither simple nor straightforward" (Cook, Gidycz, Koss, & Murphy, 2011). Perhaps the most compelling inconsistency within the SES literature is the seemingly ubiquitous discrepancy between female victimization rates and male perpetration rates.

The Victimization-Perpetration Discrepancy

Spitzberg (1999) introduces his meta analysis by emphasizing that prevalence rates ranging from 5% to 25% for sexual violence and victimization represent a "national crisis" (p. 241). His analysis includes 120 studies, spanning over 40 years, and encompassing 106,088 respondents; his results indicate 12.85% rape victimization prevalence for females, and 4.73%

rape perpetration prevalence for males. These results led Spitzberg to conclude that the VPD is either the result of significantly biased reporting, or that relatively few males are individually responsible for perpetrating a large number rapes. The few-perpetrators-many-victims conceptualization of the VPD has been contested by other researchers, however, including Koss and colleagues (1987). The proposition that all sexual violence is perpetrated by so few males becomes even less feasible when taking into consideration the most recent figures from surveys which suggest that most cases of rape and sexual victimization are perpetrated by male individuals whom are known to their female victims (Black et al., 2011). Rough estimates from figures taken from such studies suggest that, for the few-perpetrator hypothesis to be feasible, would require each male rapist to perpetrate an average of 3 to 4 sexual assaults (in order to approximate the suggested ratio of assaults to perpetrations). The likelihood that such men are able to victimize so many women, combined with the fact that most of the women know their assailants makes the few-perpetrator hypothesis even more untenable. However, no contemporary research has been able to provide a sufficient model for explaining the VPD.

In her review of over 20 empirically based rape prevalence studies, Koss (1993) concludes by offering two potential threats to the validity of rape estimates – potentially contributing to variable rates throughout the literature, as well as the VPD. The first threat, “fabrication,” represents the potential for females to intentionally over report victimizations while males intentionally underreport perpetrations. A number of researchers have argued that fabrication has minimal (if any) impact on prevalence estimates, noting no significant rate differences rates attained through surveys compared to those attained through interview (Koss & Giecz, 1985; Koss et al., 1987; Ouimette et al., 2000; Ross & Allgeier, 1996).

According to Koss (1993), the second threat, “nondisclosure” is a much likelier mechanism for decreasing the validity of rape prevalence rates. Nondisclosure may occur intentionally or unintentionally – individuals may choose not to disclose experiences, or they may inadvertently not report experiences because they have not been adequately prompted. However, as with fabrication, intentional nondisclosure (dishonesty) is thought to be only minimally influential in affecting prevalence rates (Koss et al., 1987). Researchers have come to view unintentional nondisclosure (lack of recall) to be the most significant threat to valid rape estimates (Koss et. al, 1987; Kolivas, 2009). Survey wording is perhaps the factor which contributes most to lack of recall, since many men will fail to define their previous sexual experiences in the terminology used by the SES (Kolivas, 2009).

Survey item wording. Survey item wording plays a significant role in the rates at which respondents disclose perpetration and victimization related to sexual violence. Research has indicated that increasing the specificity of survey item wording is associated with an increase in rates of disclosure. For example, when the screening item for the original NCS (Bureau of Justice Statistics, 1987) was changed from “being attacked” to questions which asked specifically about “rape” and “sexual attacks,” prevalence rates increased by a factor of greater than two (Lynch, 1996). Similarly, Fisher, Cullen and Turner (2000) observed a nine-fold increase in rape prevalence by using behaviorally specific questions instead of the standard NCVS questions. Fricker et al. (2003) also saw a significant increase in disclosure of childhood sexual abuse by using behaviorally specific questions rather than questions which included the term “sexual abuse.”

Abbey et al.'s (2005) investigation into the importance of frame of reference on responding to questions related to sexual assault further demonstrates the importance of item wording and context, and how slight alterations can produce significant differences in respondent outcomes. With their sample of 307 women and 166 men, Abbey et al., administered one of two modified versions of the SES to half of each gender. The investigators created parallel versions of both male and female SES by alternating the order in which each question was presented – a tactic-first version, or a type-of-sex first version. Each sex specific survey contained the same information, but the order in which it was presented was alternated. In the type-of-sex first version, items were presented in much the same way as they are on the original SES, except type of sex acquired served as a stem to be completed by various tactic options. For example, the female type-of-sex first version would say “Since the age of 14, has a man ever fondled, kissed, or sexually touched you without your consent ...” and then the respondent would choose the appropriate tactic ranging from “...by overwhelming you with continual arguments and pressure although you indicated you didn’t want to.” to “...by using some degree of physical force ...” (Abbey et al., 2005, p. 373). The tactic-first version would simply reverse the clauses so that the tactic would serve as the stem, and the respondent would be asked to choose the appropriate type of sex acquired to complete the item – for example, “Since the age of 14, has a man ever overwhelmed you with continual arguments and pressure, although you indicated you didn’t want to, in order to...” (Abbey et al., 2005, p.373).

The results of Abbey et al.'s (2005) study show that individuals (both men and women) who were given the tactic-first survey version disclosed significantly higher rates of perpetration and victimization compared to those who received the type-of-sex first survey. For forced sexual victimization, women in the tactic-first group reported at rates of 75% as opposed to 62% in the

type-of-sex first category; 69% of men in the tactic-first group reported perpetrating forced sex, while only 36% in the type-of-sex first group reported perpetrating forced sex (Abbey et al., 2005, p. 368). These results are particularly noteworthy because of the inordinately high disclosure rate among male perpetrators.

Available literature demonstrates that sexual violence is a serious public safety concern which has been underestimated in years past. The SES has proven to be a useful tool for researchers interested in rape prevalence; however, continued investigation into the VPD and the effects of survey item wording is needed. Kolivas and Gross (2007) suggests that slight wording differences between male (perpetrator) and female (victim) forms of the SES may be a central factor contributing to the VPD. They argued that the SES is worded in such a way that female and male respondents are not only being asked about different experience (victimization vs. perpetration), but they are being asked to perform different cognitive tasks in order to accurately respond to survey items. Take, for example wording differences between these two SES (Koss et al., 1987) items:

Female version:

Have you had sexual intercourse when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?

Male version:

Have you engaged in sexual intercourse with a woman when she didn't want to by overwhelming her with continual arguments and pressure?"

Though at first glance the questions may seem different superficially, one is readily able to conclude that they are in fact asking respondents to complete different tasks. The female version

asks the respondent to answer the question according to what she experienced – what was directly observable as well as her own internal state of desire or want.

The male version of this question asks the respondent to engage in simple recall as well, however, the male respondent is also asked to account for his partner/victim's level of want. It seems likely that there are instances in which a female would engage in sexual activities, for whatever reason, when she did not want to, and her partner fails to interpret accurately her physical intimacy desire (or lack thereof). This differential wording, and additional interpretive requirement on male respondents, seems to create the potential for male and females to report different accounts of the very same experience, and may help to explain the VPD pattern which has proliferated SES research.

The purpose of the present study is to examine the effect of behaviorally specific survey items on disclosure of rape perpetration and victimization. Since literature suggests that discrepant rates between perpetrators and victims are in part due to differences in survey item wording, and the distinct tasks which each require of the respondent, SES items (Koss et al., 1987) are compared to modified items which have been reworded so that the interpretation of female want need not be considered by either party. Comparisons will be made by administering two original SES items (one for coerced contact and one for coerced intercourse), as well as two corresponding modified SES items (in which female want is omitted), to each participant. It is expected that original SES items will maintain a victimization perpetration rate discrepancy between males and females similar to previously reported – with men reporting lower rates of perpetration and women reporting higher rates of victimization – and that the modified items will result in a significantly smaller discrepancy between victimization and perpetration rates. That is, victimization rates obtained by both the original SES (Koss et al., 1987) items and the

modified SES items will be consistent with those found in the literature. Conversely, male reports of perpetration obtained using the modified SES items are predicted to be higher than rates obtained using original SES. The predicted increase in perpetration rates is expected to narrow the discrepancy between perpetration and victimization rates, which is commonly observed in the SES literature.

CHAPTER II

METHODS

Participants

Participants were recruited from a public university in the Southeastern United States through Psychological Subject Participants Manager (PSPM) and classroom announcements, as part of a larger study (Kolivas, 2009). A total of six hundred seventy-one participants were initially recruited. The initial sample consisted of 314 males (46.7%) and 357 females (53.1%) with an average age of 20.5 years ($SD = 3.6$). Ethnicities within the sample included 78.4% Caucasian, 15.0% African American, and 1.0% Hispanic, 0.7% Native American, and 1.0% identified as “other;” the remaining 0.3% did not disclose their ethnic background. Current relationship status of participants consisted of 87.2% single, 3.1% engaged, 2.8% married, 1.2% divorced, 0.1% separated, and 4.6% indicated “other,” with 0.9% not reporting marital status. With regard to sexual experiences, 79.6% indicated a history of sexual intercourse, 19.9% indicated they had never had sexual intercourse, and 0.4% did not report. With regard to sexual orientation, participants identified as 96.4% heterosexual, 2.1% bisexual, and 1.2% gay/lesbian, with 0.3% not reporting. Thirty nine percent of participants indicated that they were members of a fraternity or sorority.

One male and one female did not submit answers for each survey item and were removed from the sample prior to analysis. Additionally, five male participants self-identified as being

homosexual, with no previous male-female sexual contact, on the demographics questionnaire. Since the focus of this survey is on heterosexual contact and intercourse, with a particular focus on male perpetrators of unwanted sexual acts against females, these five participants were also excluded from the final analysis. Lastly, participants who responded inconsistently (for example, by endorsing mutually exclusive answers) were identified and removed from the data set in an attempt to reduce the influence of responses given by careless responders. For example, all participants were asked, in the demographics section, whether or not they had ever had sexual intercourse with an individual of the opposite sex. Individuals who answered “no,” indicating that they had never had intercourse, on this demographic question, but later went on to positively endorse an intercourse item on the subsequent surveys, were labeled as inconsistent responders and removed from the dataset – one male and 5 females were found to be inconsistent responders and removed. These exclusions brought the final total sample size to 659 (308 males and 351 females).

Measures

Sexual Experiences Survey (Koss et al., 1987). The SES is a 10-item self-report questionnaire used to measure of females’ past experiences of sexual victimization and males’ histories of sexually coercive and aggressive behaviors since age of 14. Items on the SES are asked in “yes/no,” self-report format describing four degrees of unwanted sexual experiences which increase in severity, including: unwanted sexual contact, sexual coercion, attempted rape, and rape. Items are worded in a manner which excludes potentially stigmatizing or confusing labels such as “rape,” “sexual assault,” or “sexual victimization/perpetration.” Participants are asked to indicate the number of times they had experienced each item since the age of 14 on a

scale ranging from once, twice, or three or more times. Koss & Gidycz (1985) provide psychometric data for the SES, citing adequate internal consistency (Cronbach's $\alpha = .74$) and test-retest reliability (.93).

For the sake of clarity and updating wording, Testa et al. (2004), made slight modifications to several survey items. For example, Testa et al. (2004) removed the words "sex play" and replaced them with behaviorally specific wording; the present study followed Testa et al.'s example and removed the words "sex play" from SES items (numbers 1, 2, and 3). Overall prevalence rates are reported using a continuum scoring method, whereby each participant was assigned a score based on the highest level of sexual aggression they endorsed: 0 = no aggression; 1 = unwanted sexual contact (items 1, 2, or 3); 2 = sexual coercion (items 4 or 5); 3 = attempted rape (items 6 or 7); and 4 = rape (items 8, 9, or 10). This scoring method was employed to help prevent the possibility of inflating incidence/prevalence, since respondents may have experienced more than one sexually aggressive act during a single sexual encounter (Testa et al., 2004).

Modified SES items devoid of "want." To explore the hypotheses that items which require male interpretations of female want may contribute to discrepant reporting between male and female respondents, modified versions of two SES items (numbers 1 and 6) were administered to participants. In modifying these items, wording changes were made so that respondents (both male and female) were not asked about the female's degree of want, but, instead asked about explicit behaviors which would have been readily observable by each party.

The modified questions, along with the original SES items are presented in Figures 1, 2, 3, and 4 of Appendix B¹.

Procedure

Participants were recruited by classroom announcements as well as through the online PSPM system. Participants were solicited from various departments on campus – psychology, biology, accounting, exercise science, and marketing. Participants enrolled in psychology and accounting courses were given research credit for participating. Students were asked for a current email address so that they could be sent a link to the online survey (via *Survey Monkey*).

All survey questions were completed by participants via an online survey program – *Survey Monkey*. Using a computer-assisted-self-interview (CASI) format has gained increasing popularity in that it allows greater anonymity, and has been demonstrated to increase respondent disclosure relative to in-person interviews and paper-and-pencil surveys (Newman, Jarlais, Turner, Gribble, Cooley, & Panone, 2002). Internet-based survey administration has also become common in survey research on college campuses due to ease of dissemination, cost effectiveness, and widespread student use and accessibility. Studies indicate response rates for internet-based surveys to be comparable to mail-in surveys (McCabe, Couper, Cranford, & Boyd, 2006) as well as interview-based telephone surveys (Parks, Pardi, & Bradizza, 2006).

Survey responses were encrypted during transmission via SSL encryption to maintain confidentiality. Upon logging on, participants were presented with an electronic statement of informed consent, which they were required to agree to in order to proceed with the survey – participants whom did not consent were redirected to the survey exit page. All participants were

¹ All figures and tables will be presented in the Appendix.

informed of their right to chose not to participate in the study, and of their right to refuse to answer any question or discontinue at any time without penalty.

After giving consent, participants were asked to complete a demographics questionnaire, and were subsequently routed to the appropriate survey, based on their gender. Each participant completed the 1987 version of the SES, as well as the two additional modified questions, described above. After completing the survey, participants were then debriefed and provided with a list of community counseling resources.

CHAPTER III

RESULTS

To examine the hypotheses that using modified SES questions (devoid of “want”) would increase male reported rates of coerced contact – compared to original SES items – frequencies of responses were compared across survey versions. Of the 308 males who answered the original SES question about perpetrating coerced sexual contact, 23 indicated single instances, 9 indicated two instances, and 14 indicated three or more instances. In total, 15% of males in the sample indicated that they had perpetrated an act of coerced contact, at least once, since the age of 14. Results from the modified SES questions yielded higher male response rates; from the total of 308 males, 33 indicated single instance, 14 indicated two instances, and 35 indicated three or more instances. When given the modified SES questions, a total of 26.6% of males indicated a history of such experiences, at least once, since the age of 14. Frequencies and percentages of male and female response rates across survey version and condition are presented in Table 1 of Appendix A.

Paired-Sample *t*-tests

To test the hypothesis that removing the analyses of female want – implicit in the original SES survey items – would produce significantly increased rates of male-reported coerced sexual contact, a paired-sample *t*-test was used to compare rates of coerced contact between the original

SES item and modified SES item. The results of this analysis support the hypothesis that removing “want” from the question produces significantly different response patterns, $t(307) = 5.737, p < .001$, with males reporting higher rates on the modified SES items than on original SES items.

Similar analyses were used for comparing male response rates for coerced sexual intercourse across original SES items and modified SES items. On the original SES item to assess coerced intercourse, 31 of the 308 individuals (10%) indicated that they had perpetrated an act of coerced sexual intercourse, at least once, since the age of 14. Comparatively, results from the modified SES question yielded 44 male respondents (14.3%) who reported at least one experience since the age of 14. A paired-sample t -test comparing male rates of coerced intercourse across original and modified SES questions also revealed significant differences, $t(307) = 3.623, p < .001$, with males reporting higher rates when given the modified SES questions.

Female rates of self-reported victimization through coerced contact and coerced sexual intercourse were analyzed in the same manner as the above analyses with males. For the original SES questions pertaining to victimization experiences related to coerced contact, 140 out of 351 females (40%) reported at least one instance of coerced contact since age 14. Comparatively, when given the modified SES item, 172 (or, 49%) of female respondents reported experiencing coerced contact one or more times since the age of 14. Results from the paired-sample t -test, $t(350) = 5.568, p < .001$, indicate that female response rates for coerced contact are significantly different across survey versions, with the modified SES questions yielding higher rates.

For female experiences of being victimized through coerced sexual intercourse, 30% of women given the original SES item reported at least one instance since the age of 14 – compared

to 33% of women who reported being victimized through coerced sexual intercourse on the modified SES version. Results from the paired-sample t -test, $t(350) = 1.62$, $p = .104$, indicate that there was no significant difference between women's self-reported rates of experiencing coerced sexual intercourse across survey versions.

To counteract the increased probability of type I error due to multiple comparisons, a Bonferroni adjustment was utilized to increase the α -level significance threshold from $p \leq .05$, to $p \leq .0125$. However, implementation of this more stringent threshold for significance did not alter the interpretations of significance for any of the above comparisons. Reported rates of male coerced intercourse ($p < .001$) and coerced contact ($p < .001$), and female coerced contact ($p < .001$) remain significantly higher on the modified survey than on the original SES, despite the Bonferroni α adjustment. Female reported rates of coerced intercourse remained between survey versions remained non significant ($p = .104$).

McNemar's Test

Responses from participants were also collapsed into dichotomous, yes-or-no variables in order to be made amenable to nonparametric comparisons. McNemar's test was then used to discern differences between original SES items and the modified versions for males and females, and contact and intercourse conditions.

Overall, in the male-contact condition, 46 responses on the SES and 82 responses on the modified version indicated an acknowledgment of at least one experience – for a total of 128 acknowledgements. Eighty (63%) of these acknowledgments represent consistent reporting across survey versions; forty participants indicated at least one instance of contact on both survey versions. The remaining 48 contact acknowledgments represent inconsistent reporting across

survey versions. Of inconsistent reporters, 6 (5%) acknowledged contact on the SES, but not on the modified version, while 42 (33%) participants acknowledged contact only on the modified version. These figures demonstrate that implementation of the modified survey version elicits an increased rate of male-contact acknowledgement, compared to the original SES. Further, these results show that the majority of participants (87%), who indicate contact experiences on the SES, respond consistently on the modified version. Therefore, the higher response rate of 82 acknowledgements on the modified version (compared to 46 on the SES) is attributable to the modified version's ability to retain (the majority of) SES responders, while capturing an additional portion which would be unaccounted for by the SES alone.

For males in the contact condition, 40 individuals indicated one or more experiences on both survey versions, and 220 indicated no experiences on either version. However, 6 males indicated experiences related to contact on the SES only (denying such experiences on the modified version), while 42 indicated contact on the modified only. From these proportions (see Figure 5), McNemar's test yielded a probability of $p < .000$, indicating a significant difference between survey versions, and corroborating the results from the paired sample *t*-test.

Overall, in the male-intercourse condition, 31 responses on the SES and 44 responses on the modified version indicated an acknowledgment of at least one experience – for a total of 75 acknowledgements. Forty-six (61%) of these acknowledgments represent consistent reporting across survey versions; twenty-three participants indicated at least one instance of intercourse on both survey versions. The remaining 29 intercourse acknowledgments represent inconsistent reporting across survey versions. Of inconsistent reporters, 8 (11%) acknowledged intercourse on the SES, but not on the modified version, while 21 (28%) participants acknowledged intercourse only on the modified version. These figures demonstrate that implementation of the

modified survey version elicited an increased rate of male-intercourse acknowledgement, compared to the original SES. Further, these results show that the majority of participants (74%), who indicated intercourse experiences on the SES, responded consistently on the modified version. Therefore, the higher response rate of 44 acknowledgements on the modified version (compared to 31 on the SES) is attributable to the modified version's ability to retain (the majority of) SES responders, while capturing an additional portion which would be unaccounted for by the SES alone.

For males in the intercourse condition, 23 individuals indicated one or more experiences on both survey versions, and 256 indicated no experiences on either version. However, 8 males indicated experiences related to intercourse on the SES only (denying such experiences on the modified version), while 21 indicated intercourse on the modified only. From these proportions (see Figure 6), McNemar's test yielded a probability of $p = .024$, indicating a significant difference between survey versions, and corroborating the results from the paired sample *t*-test.

Overall, in the female-contact condition, 140 responses on the SES and 172 responses on the modified version indicated an acknowledgment of at least one experience – for a total of 312 acknowledgements. Two-hundred-sixty-four (85%) of these acknowledgements represent consistent reporting across survey versions; 132 participants indicated at least one instance of contact on both survey versions. The remaining 48 contact acknowledgements represent inconsistent reporting across survey versions. Of inconsistent reporters, 8 (3%) acknowledged contact on the SES, but not on the modified version, while 40 (13%) participants acknowledged contact only on the modified version. These figures demonstrate that implementation of the modified survey version elicited an increased rate of female-contact acknowledgement, compared to the original SES. Further, these results show that the majority of participants

(94%), who indicated contact experiences on the SES, responded consistently on the modified version. Therefore, the higher response rate of 172 acknowledgements on the modified version (compared to 140 on the SES) is attributable to the modified version's ability to retain (the majority of) SES responders, while capturing an additional portion which would be unaccounted for by the SES alone.

For females in the contact condition, 132 individuals indicated one or more experiences on both survey versions, and 171 indicated no experiences on either version. However, 8 females indicated experiences related to contact on the SES only (denying such experiences on the modified version), while 40 indicated contact on the modified only. From these proportions (see Figure 7), McNemar's test yielded a probability of $p < .000$, indicating a significant difference between survey versions, and corroborating the results from the paired sample *t*-test.

Overall, in the female-intercourse condition, 104 responses on the SES and 116 responses on the modified version indicated an acknowledgment of at least one experience – for a total of 220 acknowledgements. One-hundred-fifty-six (61%) of these acknowledgments represent consistent reporting across survey versions; seventy-eight participants indicated at least one instance of intercourse on both survey versions. The remaining 64 intercourse acknowledgments represent inconsistent reporting across survey versions. Of inconsistent reporters, 26 (12%) acknowledged intercourse on the SES, but not on the modified version, while 38 (17%) participants acknowledged intercourse only on the modified version. These figures demonstrate that implementation of the modified survey version elicit an increased rate of female-intercourse acknowledgement, compared to the original SES. Further, these results show that the majority of participants (75%), who indicated intercourse experiences on the SES, responded consistently on the modified version. Therefore, the higher response rate of 116 acknowledgements on the

modified version (compared to 104 on the SES) is attributable to the modified version's ability to retain (the majority of) SES responders, while capturing an additional portion which would be unaccounted for by the SES alone.

For females in the intercourse condition, 78 individuals indicated one or more experiences on both survey versions, and 209 indicated no experiences on either version. However, 26 females indicated experiences related to intercourse on the SES only (denying such experiences on the modified version), while 38 indicated intercourse on the modified only. From these proportions (see Figure 8), McNemar's test yielded a probability of $p = .169$, indicating a no significant difference between survey versions, which corroborates the results from the above paired-sample t -test.

CHAPTER IV

DISCUSSION

The purpose of this research was to investigate how wording modifications on SES survey items may influence self-reported rates of female and male sexual experiences. A persistent discrepancy between female reports of sexual victimization and male reports of perpetrating unwanted sexual acts has been demonstrated by previous researchers in the field of sexual violence. This study proposed that this discrepancy may be in part due to survey item wording which may inadvertently be asking men and women to engage in different cognitive tasks in order to answer questions posed to them. Male and female self-reports of sexual experiences with coercive contact and intercourse were compared between the original SES (Koss et al., 1987) and modified items (from Kolivas, 2009). It was hypothesized that slight modifications to the wording of these items –specifically, by removal of wording which asks respondents to take female want into consideration – would allow for increased male response rates, and diminish the male-female reporting discrepancies. Consistent with this hypothesis, comparisons between survey versions indicated significant increases in male reports of coerced contact and intercourse resulted from using modified survey items devoid of want.

When asked to report on their sexual experiences, male reports varied significantly based on the inclusion or exclusion of female-want assessment. This finding suggests that original SES items require male and female respondents to engage in different cognitive tasks. When a

woman is presented the SES question with the original want-based wording, she must recall a particular situation and then recall her own level of desire or lack of desire to participate in that particular sexual exchange. Conversely, men who are presented with the standard SES question must recall a situation and then retrospectively assess his own perception of whether or not the female wanted to proceed or not. This method of questioning asks men to engage in more speculative answering. That is, in addition to assessing their own sexual interest, men must interpret the meaning of the woman's verbal and nonverbal indicators of sexual interest (consent versus non-consent).

Previous research has helped to highlight the difficulties associated with interpreting the sexual intentions and desires of others. Marx and Gross (1995) conducted an investigation in which male participants were asked to listen to an audio-taped date rape vignette between a male and female, and signal if and when the male should stop his sexual advances. Participants who were told that the female model initially resisted sexual contact on a prior date, but relented on the second attempt, signaled that the male model should stop significantly later in the recording than participants who were told that the female model had offered no prior resistance. This process of initial female resistance and later acquiescence to male sexual advances represents a phenomenon referred to as perceived token sexual resistance. Surprisingly, a parallel study using female participants under the same methodological conditions, conducted by Van Wie, Gross, and Marx (1995), produced similar results. Females relied on contextual variables (resistance versus no resistance behaviors during previous sexual engagements) to make judgments about whether the female's sexual refusal was perceived of as token resistance. Interpretations of the degree of female want may be difficult to discern for men and women alike. Furthermore, as these researchers point out, perceived token resistance may not only perpetuate unwanted sexual

contact, but may actually reinforce male aggression and/or coercion, as well as disregard for and misinterpretation of sexual refusals (particularly polite refusals). That is, when a woman stops resisting a man's sexual advances, regardless of whether it is due to changing her mind, coercion, or fear it contributes to establishing a learning history in which male persistence intermittently results in additional sexual activity (e.g., Marx & Gross, 1995).

This perceived female tendency to offer up false, or “token,” resistance in response to male sexual advances likely plays an important role in how males attempt to initiate sexual interactions with women, and how both men and women interpret their own sexual experiences. To reiterate, the wording of the original SES questions for males (“*when she didn’t want to*”) asks males to interpret an internal state within his female counterpart. Unless her wants and intentions are explicitly and frankly stated, men are likely to make attributions based on their own perceptions of behavior. For example, completed sexual engagements are likely to be interpreted as “wanted.” Males are likely to interpret discontinuation of female resistance as being due to her desire to proceed with the experience. However, as noted above females may discontinue resisting due to any number of reasons: fear of escalating aggression; fear of losing a relationship; fear of unwanted social consequences, to name a few. Through using want-based language, the original SES may fail to detect men who label their own experiences differently than how they are being labeled in the SES.

Results from female respondents show increased reporting on the modified version for coercive contact (compared to the original SES) but no similar increase in the coerced intercourse condition. These findings would seem to suggest that, in negotiations of sexual activities, women draw a clear and fundamental distinction between intercourse and sexual activities of lesser degrees. With its want-based classification, the original SES may too

narrowly circumscribe women's experiences with sexual contact. That is to say, as Marx and Gross (1995) suggest, women may capitulate to male advances for any number of reasons (e.g., fear of escalating male aggression, fear of social repercussions for denying her partner, or even a change in her desire for sexual activity). Women may also see sexual contact as a means to satiate, or stave off, male attempts at intercourse. Perhaps this explanation is why removing want-based language elicits higher reports of contact but, no increase in rates of intercourse. Intercourse is less ambiguous and generally less permissible than contact, and women are less likely to acquiesce to intercourse as a result of "*continued arguments and pressure*," compared to less severe acts of contact.

Generally, removing want-based language from questions about experiences with coerced sexual contact and intercourse identifies a largely consistent sample of men and women as the original SES items; however, the modified version appears to identify an additional contingent of responders as well. Further research is needed to continue to parse apart the intricacies of survey item wording and how it affects men and women's appraisals and reporting of sexual experiences. The results of this study do help reaffirm that men and women come away from sexual encounters with different understandings of their experiences. These results also further insinuate the dubiousness of the SES's utility with epidemiological study of male perpetration of sexual violence. However, the SES, and the discrepant male-female rates it produces, is valuable to the extent that it illuminates the inherent complexities of sexual consent. As indicated by Winslett and Gross (2008), frank discussion of sexual boundaries between partners may be the most effective strategy for reducing the ambiguity of consent.

Limitations and Suggestions for Future Research

Several limitations of this study should be duly noted. Firstly, due to demographics of the sample, generalizability of the results to other populations cannot be determined.

Replications of this study with samples of greater diversity and community samples would help bolster the current findings. Secondly, this investigation was limited in scope to concern only SES items regarding coercive experiences. The methodology of this study is amenable to application towards other categories of sexual misconduct within the SES. Replications along such lines would be informative.

LIST OF REFERENCES

REFERENCES

- Abbey, A., McAuslan, P., Zawacki, T., Clinton, A. & Buck, P. O. (2001). Attitudinal, experiential, and situational predictors of sexual assault perpetration. *Journal of Interpersonal Violence, 16*, 784-807.
- Abbey, A., Parkhill, & Koss, M. (2005). The effects of frame of reference on responses to questions about sexual assault victimization and perpetration. *Psychology of Women Quarterly, 29* (4), 364-373.
- Abbey, A., Parkhill, M. R., BeShears, R., Clinton-Sherrod, A. M., & Zawacki, T. (2006). Cross-sectional predictors of sexual assault perpetration in a community sample of single African American and Caucasian men. *Aggressive Behavior, 32*, 54-67.
- Abbey, A., Wegner, R., Pierce, J., & Jacques-Tiura, A. J. (2012). Patterns of sexual aggression in a community sample of young men. *Psychology of Violence, 2*(1), 1-15.
- Basile, K. C., & Smith, S. G. (2011). Sexual victimization of women: Prevalence, characteristics, and the role of public health and prevention. *American Journal of Lifestyle Medicine, 5* (6), 407-417.
- Black, M.C., Basile, K.C., Breiding, M.J., Smith, S.G., Walters, M.L., Merrick, M.T., et al. (2011). *The national intimate partner and sexual violence survey (NISVS): 2010 Summary report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Bureau of Justice Statistics. (1987, September). *Criminal victimization, 1986*. Washington, DC: U.S. Department of Justice.
- Bureau of Justice Statistics. (2011, September). *Criminal victimization, 2010*. Washington, DC: U.S. Department of Justice.
- Burnam, M. A., Stein, J. A., Golding, J. M., Siegel, J. M., Sorenson, S. B., Forsythe, A. B., et al. (1988). Sexual assault and mental disorders in a community population. *Journal of Consulting and Clinical Psychology, 56*(6), 843-850.
- Chen, L. P., Murad, M. H., Paras, M. L., Colbenson, K. M., Sattler, A. L., Goranson, E. N., et al. (2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: Systematic review and meta-analysis. *Mayo Clinic Proceedings, 85*(7), 618-629.
- Clay-Warner, J. & Burt, C. H. (2005). Rape reporting after reforms: Have times really changed? *Violence Against Women, 11* (2), 150-176.
- Cook, S. (2002). Self-reports of sexual, physical, and nonphysical abuse perpetration: A comparison of three measures. *Violence Against Women, 8*(5), 541-565.
- Cook, S.L., Gidycz, C. A., Koss, M. P., & Murphy, M. (2011). Emerging issues in the measurement of rape victimization. *Violence Against Women, 17*(2), 201-218.
- Crowell, N. A. & Burgess, A. W. (Eds.). (1996). *Understanding violence against women*. Washington DC: National Academy Press.

- Estrich, S. (1987). *Real Rape*. Harvard University Press.
- Federal Bureau of Investigation. (2011). *Crime in the United States 2010: Uniform Crime Reports*. Washington, DC: US Government Printing Office.
- Fisher, B. S. (2009). The effects of survey question wording on rape estimates: Evidence from a quasi-experimental design. *Violence Against Women*, 15 (2), 133-147.
- Fisher, B. S., Cullen, F. T. & Turner, M. G. (2000). The sexual victimization of college women (NCJ 182369). Washington, DC: Bureau of Justice Statistics, National Institute of Justice.
- Fowler Jr., F. (1992). How unclear terms affect survey data. *Public Opinion Quarterly*, 56(2), 218-231.
- Fricker, A. E., Smith, D. W., Davis, J. L., & Hanson, R. F. (2003). Effects of context and question type on endorsement of childhood sexual abuse. *Journal of Traumatic Stress*, 16(3), 265-268.
- Gilbert, N. N. (1991). The phantom epidemic of sexual assault. *Public Interest*, (103), 54-65.
- Golding, J. M. (1999). Sexual assault history and medical care seeking: The roles of symptom prevalence and illness behavior. *Psychological Health*, 14, 949-957.
- Gross, A., Winslett, A., Roberts, M. & Gohm, C. (2006). An examination of sexual violence against college women. *Violence Against Women*, 12 (3), 288-300.
- Gyllys, J. A. & McNamara, J. R. (1996). A further examination of the sexual experiences survey. *Behavioral Sciences and the Law*, 14, 245-260.
- Holmes, M., Resnick, H., Kilpatrick, D., & Best, D. (1996). Rape related pregnancy: Estimates and descriptive characteristics from a national sample of women. *American Journal of Obstetrics and Gynecology*, 175, 320-325.
- Jacques-Tiura, A. J., Tkatch, R., Abbey, A., & Wegner, R. (2010). Disclosure of sexual assault: Characteristics and implications for post-traumatic stress symptoms among African American and Caucasian survivors. *Journal of Trauma and Dissociation*, 11(2), 174-192.
- Kolivas, E. D. (2009). *Detecting Sexual Assault Perpetration and Victimization: Effect of Sexual Experiences Survey Item Wording*. Unpublished master's thesis, University of Mississippi, Oxford, USA.
- Kolivas, E. D. & Gross, A. M. (2007). Assessing sexual aggression: Addressing the gap between rape victimization and perpetration prevalence rates. *Aggression and Violent Behavior*, 12, 315-328.
- Koss, M. P. (1993). Detecting the scope of rape: A review of prevalence research methods. *Journal of Interpersonal Violence*, 8 (2), 198-222.
- Koss, M. P. & Gidycz, C. A. (1985). Sexual Experiences Survey: Reliability and validity. *Journal of Consulting and Clinical Psychology*, 53 (3), 422-423.
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The Scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55, 162-170.
- Koss, M. P. & Heslet, L. (1992). Somatic consequences of violence against women. *Archives of Family Medicine*, 1, 53-59.
- Koss, M. P., & Oros, C. J. (1982). Sexual Experiences Survey: A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*, 50(3), 455-457.
- Lynch, J. P. (1996). Clarifying divergent estimates of rape from two national surveys. *Public Opinion Quarterly*, 60(3), 410.

- Mackey, T., Sereika, S. M., Weissfeld, L. A., Hacker, S. S., Zender, J. F., & Heard, S. L. (1992). Factors associated with long-term depressive symptoms of sexual assault victims. *Archives of Psychiatric Nursing*, 6, 10-25.
- Martin, L. E. (2010). Perpetrating sexual assault: Assessing prevalence, attitudes, and behaviors among male military personnel. Unpublished master's thesis, University of North Carolina Wilmington, Wilmington, NC, USA.
- Marx, B., & Gross, A. M. (1995). A male's conception of date rape: An analysis of two contextual variables. *Behavior Modification*, 19 (4), 451-463.
- McCabe, S. E., Couper, M. P., Cranford, J. A., & Boyd, C. J. (2006). Comparison of web and mail surveys for studying secondary consequences associated with substance use: Evidence for minimal mode effects. *Addictive Behaviors*, 31 (1), 162-168.
- McFarlane, J., Malecha, A., Watson, K., Gist, J., Batten, E., Hall, I., et al. (2005). Intimate partner sexual assault against women: Frequency, health consequences, and treatment outcomes. *Obstetrics and Gynecology*, 105(1), 99-108.
- National Sexual Violence Research Center. (2011). *National research on sexual violence: A look to the future (An overview for advocates and prevention educators)*. Retrieved January 17, 2012, from <http://www.nsvrc.org/about/national-sexual-violence-resource-center>
- Newman, J. C., Des Jarlais, D. C., Turner, C. F., Gribble, J., Cooley, P., & Paone, D. (2002). The differential effects of face-to-face and computer interviews modes. *American Journal of Public Health*, 92 (2), 294-297.
- Ouimette, P. C., Shaw, J., Drozd, F., & Leader, J. (2000). Consistency of reports of rape behaviors among non-incarcerated men. *Psychology of Men and Masculinity*, 1 (2), 133-139.
- Parks, K. A., Pardi, A. M., & Bradizza, C. M. (2006). Collecting data on alcohol use and alcohol-related victimization: a comparison of telephone and Web-based survey methods. *Journal of Studies on Alcohol*, 67 (2), 318-323.
- Porter, J. F. & Critelli, J. W. (1992). Measurement of sexual aggression in college men: A methodological analysis. *Archives of Sexual Behavior*, 21, 525-542.
- Resnick, P. A., Calhoun, K. S., Atkeson, B. M., & Ellis, E. M. (1981). Social adjustment in victims of sexual assault. *Journal of Counseling and Clinical Psychology*, 49, 705-712.
- Ross, R. R. & Allgeier, E. R. (1996). Behind the pencil/paper measurement of sexual coercion: Interview-based clarification of men's interpretations of sexual experiences survey items. *Journal of Applied Social Psychology*, 26 (18), 1587-1616
- Rothbaum, B. O., Foa, E. B., Riggs, D. S., Murdock, T., & Walsh, W. (1992). A prospective examination of post-traumatic stress disorder in rape victims. *Journal of Traumatic Stress*, 5(3), 455-475.
- Sarkar, N. N., & Sarkar, R. (2005). Sexual assault on woman: Its impact on her life and living in society. *Sexual and Relationship Therapy*, 20(4), 407-419.
- Schaeffer, N. C., & Presser, S. (2003). The science of asking questions. *Annual Review of Sociology*, 29, 65-88.
- Senn, C. Y., Desmarais, S., Verberg, N., & Wood, E. (2000). Predicting coercive sexual behavior across the lifespan in a random sample of Canadian men. *Journal of Social and Personal Relationships*, 17(1), 95-113.
- Sommers, M. S. (2007). Determining patterns of genital injury from sexual assault: A review. *Trauma Violence Abuse*, 8, 270-280.
- Sorenson, S. B. & Golding, J. M. (1990). Depressive sequelae of recent criminal victimization.

- Journal of Traumatic Stress*, 3(3), 337-350.
- Spitzberg, B. H. (1999). An analysis of empirical estimates of sexual aggression victimization and perpetration. *Violence and Victims*, 14 (3), 241-260.
- Testa, M. (2002). The impact of men's alcohol consumption on perpetration of sexual aggression. *Clinical Psychology Review*, 22 (8), 1239-1263.
- Testa, M., Van Zile-Tamsen, C., Livingston, J. A., & Koss, M. P. (2004). Assessing women's experiences of sexual aggression using the Sexual Experiences Survey: Evidence for validity and implications for research. *Psychology of Women Quarterly*, 28, 256-265.
- Van Wie, V. E., Gross, A. M., & Marx, B. P. (1995). Female's perception of date rape: An examination of two contextual variables. *Violence Against Women*, 1 (4), 351-365.
- Winslett, A., & Gross, A. (2008). Sexual Boundaries: An examination of the importance of talking before touching. *Violence Against Women*, 14 (5), 542-562.

LIST OF APPENDICES

APPENDIX A

Table 1. Male and Female Consistency Across Contact and Intercourse Items

		<u>Percent (<i>Frequency</i>)</u>			
		Consistent(-) ^a	Consistent(+) ^b	Modified(+) ^c	SES(+) ^d
		<i>N (%)</i>			
<i>Male</i>					
	Contact:	71.4 (220)	13.0 (40)	13.6 (42)	1.9 (6)
	Intercourse:	83.1 (256)	7.5 (23)	6.8 (21)	2.6 (8)
<i>Female</i>					
	Contact:	48.7 (171)	37.6 (132)	11.4 (40)	2.3 (8)
	Intercourse:	59.5 (209)	22.2 (78)	10.8 (38)	7.4 (26)

^aDenied experiences on both SES and Modified items^bAcknowledged experiencing at least one instance on both SES and Modified^cAcknowledged experiencing at least one instance on the Modified items, but denied on the SES^dAcknowledged experiencing at least one instance on the SES items, but denied on Modified

APPENDIX B

Figure 1. Female-Version Original SES^a Items for Coerced Contact and Coerced Intercourse

Coerced Contact: *Have you ever been fondled, kissed, or touched sexually when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?*

Coerced Intercourse: *Have you had sexual intercourse when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?*

^aTaken from Koss et al. (1987)

Figure 2. Female-Version Modified SES Items for Coerced Contact and Coerced Intercourse

Coerced Contact: *Have you ever been fondled, kissed, or touched sexually by a man after you first resisted his advances, but due to his continued arguing and/or pressuring you, you stopped resisting?*

Coerced Intercourse: *Have you ever had sexual intercourse with a man after first resisting his advances, but due to his continued arguing and/or pressuring, you stopped resisting?*

Figure 3. Male-Version Original SES^a Items for Coerced Contact and Coerced Intercourse

Coerced Contact: *Have you ever fondled, kissed, or touched a woman sexually when she didn't want to by overwhelming her with continual arguments and pressure?*

Coerced Intercourse: *Have you had sexual intercourse with a woman when she didn't want to by overwhelming her with continual arguments and pressure?*

^aTaken from Koss et al. (1987)

Figure 4. Male-Version Modified SES Items for Coerced Contact and Coerced Intercourse

Coerced Contact: *Have you ever fondled, kissed, or touched sexually a woman who at first resisted your advances, but due to your continued arguing and/or pressuring her she stopped resisting?*

Coerced Intercourse: *Have you ever had sexual intercourse with a woman who at first resisted your advances, but due to your continued arguing and/or pressuring her, she stopped resisting?*

Figure 5. Male Responses to Contact Items Across Survey Versions

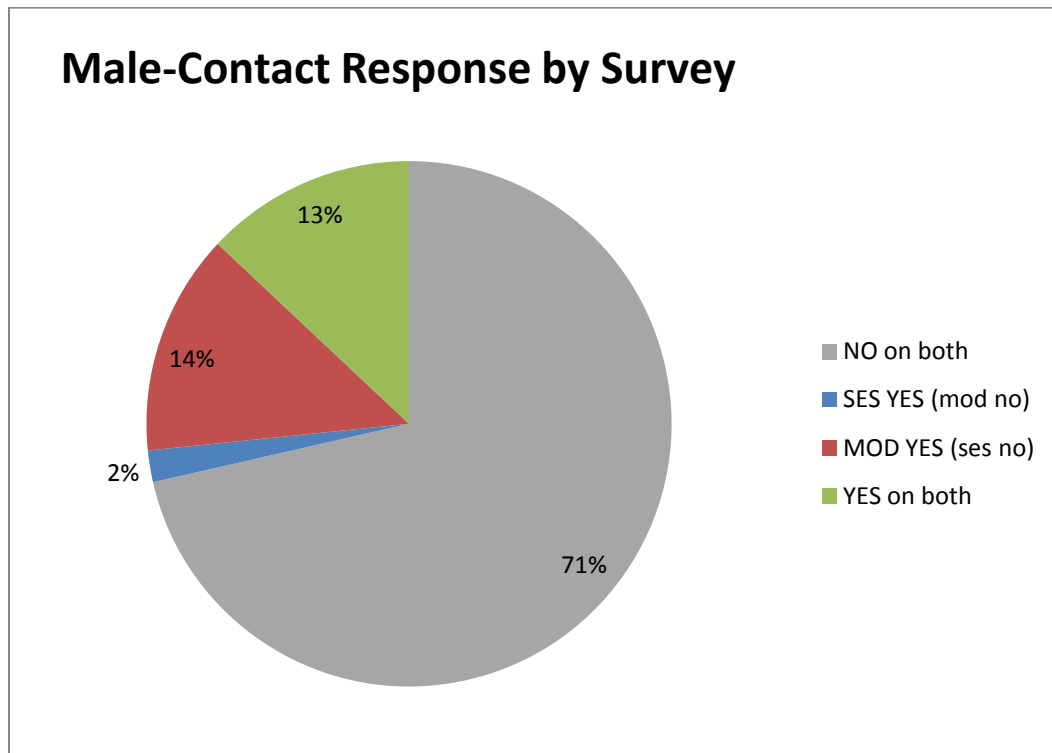


Figure 6. Male Responses to Intercourse Items Across Survey Versions

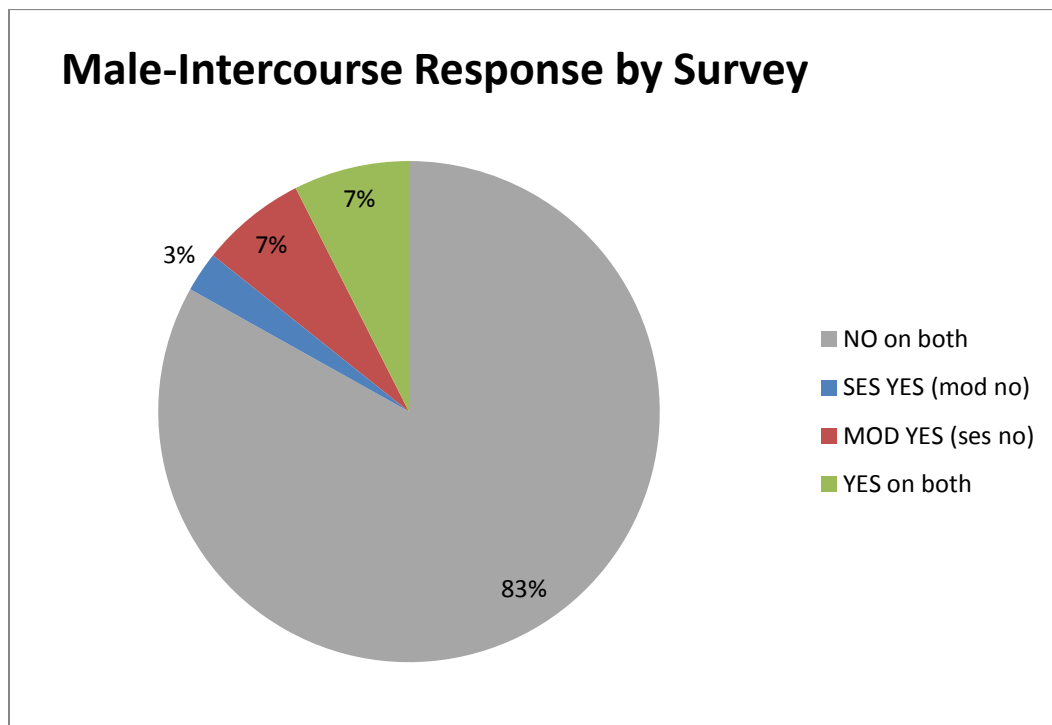


Figure 7. Female Responses to Contact Items Across Survey Versions

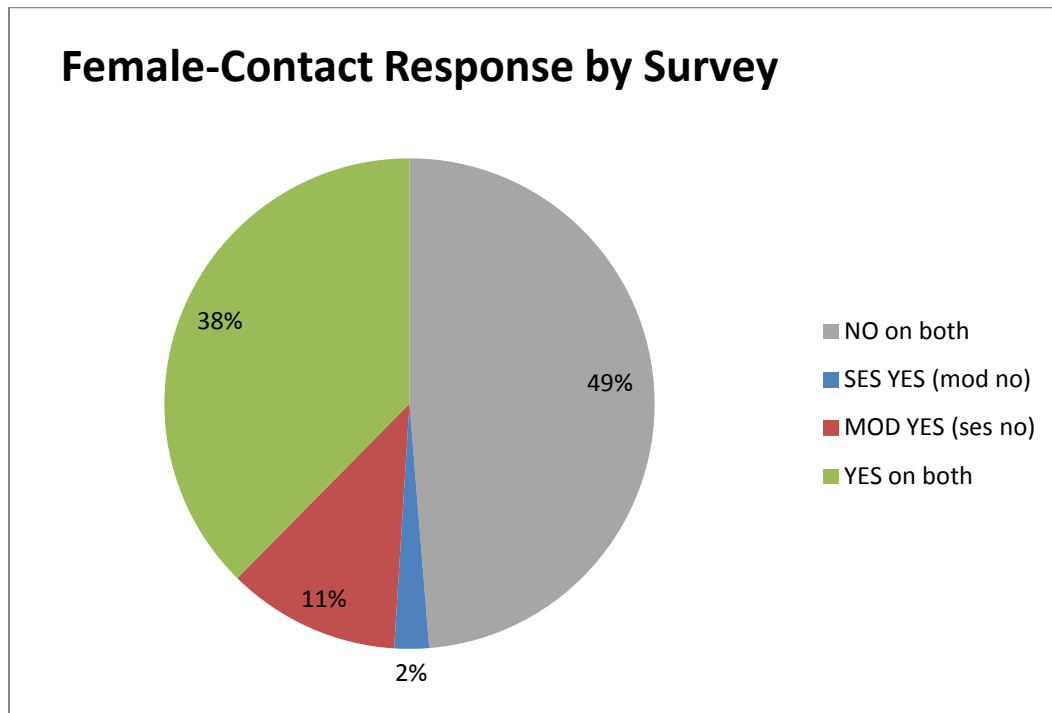
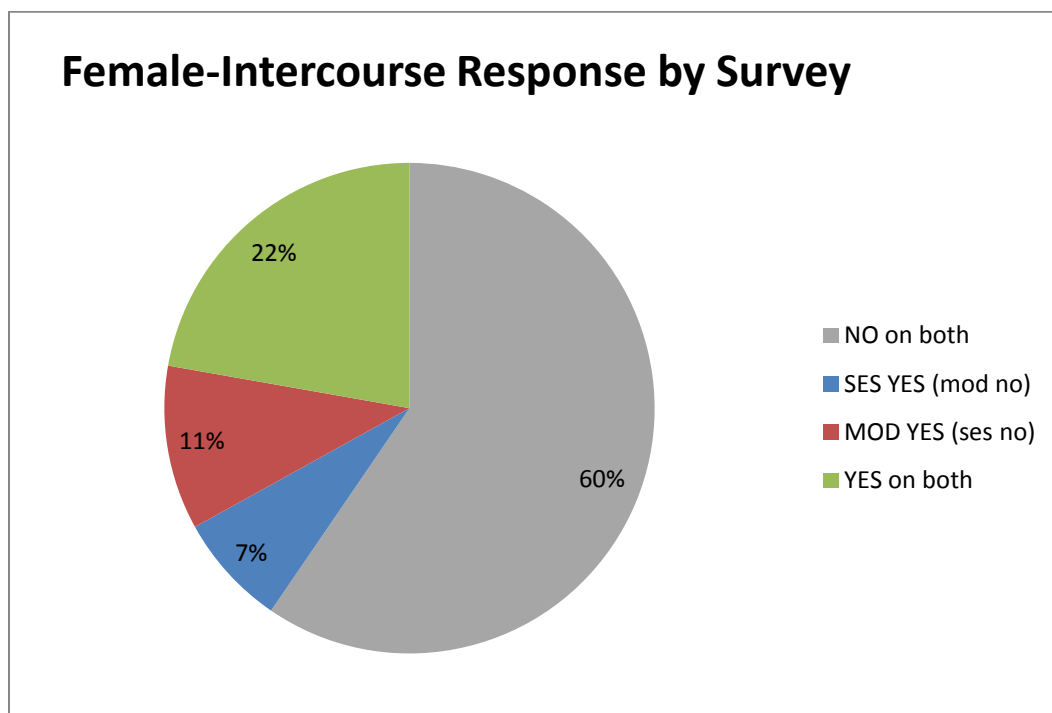


Figure 8. Female Responses to Intercourse Items Across Survey Versions



VITA

Walter Thomas Rueff Jr. was born on November 10, 1983 in Jackson, Mississippi. He graduated St. Andrew's Episcopal School in 2002 and went on to peruse B.S. in psychology at Millsaps College in Jackson, Mississippi. At Millsaps he earned the Gordon Allport Award for the application of psychology, was recognized for excellence overall in written comprehensive exams, and graduated with honors in 2007. After college he worked as a polysomnographic technologist at the University of Mississippi Medical Center's Sleep Disorders Center. In 2009, Walter began his graduate studies at the University of Mississippi's doctoral program in Clinical Psychology.